In the Claims:

Please cancel claims 2-3 and 6-7 without prejudice. Please amend claims 1, 4, 5, 8, 11, 13, 16, and 18 as shown below.

1. (Currently amended) A library comprising ~~distinct LC-sense~~ large circular-sense molecules, wherein said large circular-sense molecule comprises vector sequence and probe sequence, wherein the probe sequence is in sense orientation, and vector sequence is generated from a single strand generating phagemid.

2. (Canceled)

3. (Canceled).

4. (Currently amended) The library of claim 1, wherein said ~~LC-sense~~ large circular-sense molecule has a length of from about 1,000 to about 20,000 nucleotides.

5. (Currently amended) The library according to claim 4, wherein the ~~distinct LC-sense~~ large circular-sense molecules are separated from each other.

6. (Canceled).

7. (Canceled)

8. (Currently amended) An array comprising a plurality of ~~distinct LC-sense~~ large circular-sense molecules ~~stably associated with~~ bound to surface of a support.

9. (Original) The array of claim 8, wherein said support comprises a coating of amino-silane, poly-L-lysine or aldehyde.

10. (Original) The array according claim 8, wherein said support is slide glass, ceramic, inorganic-organic composite, flexible plastic film, silicon, metal, or membrane.

11. (Currently amended) A method for making the array of claim 8, comprising

(i) inserting a nucleic acid fragment into a vector that generates single stranded form of the vector;

(ii) preparing bacterial transformants by introducing the vector containing the insert into competent bacterial cells to make bacterial transformants;

(iii) infecting the transformants with helper phage to produce the ~~LC-sense~~ large circular-sense molecule;

(iv) isolating the ~~LC-sense~~ large circular-sense molecule from culture supernatant of the transformants; and

(v) arraying the ~~LC-sense~~ large circular-sense molecule onto the surface of a support.

12. (Original) The method of claim 11, wherein the nucleic acid fragment is inserted into the vector unidirectionally.

13. (Currently amended) A method of detecting presence of DNA in a sample with respect to a population of ~~distinct LC-sense~~ large circular-sense molecules in an array comprising:

(i) labeling the DNA in the sample;

(ii) contacting a sample containing the labeled DNA with the array according to claim 8;

(iii) allowing the labeled DNA in the sample to hybridize to the ~~LC-sense~~ large circular-sense molecule in the array; and

(iv) determining binding of the DNA to the ~~LC-sense~~ large circular-sense molecule, wherein the presence of a signal on the array indicates the presence of the DNA with respect to an arrayed ~~LC-sense~~ large circular-sense molecule.

14. (Original) The method according to claim 13, wherein the label is streptavidin-alkaline phosphatase conjugate, chemifluorescent or chemiluminescent.

15. (Original) The method according to claim 13, wherein the label is Cy3 or Cy5.

16. (Currently amended) A method for detecting presence of DNA in two or more samples of nucleic acid molecules, comprising:

(i) labeling a first population of DNA from a first sample;

(ii) labeling a second population of DNA from a second sample with a different label from the label in (i);

(iii) contacting a sample containing the first population of labeled DNA with the array according to claim 8;

(iv) allowing the first population of labeled DNA in the sample to hybridize to the ~~LC-sense molecule in the array~~ large circular-sense molecules;

(v) contacting a sample containing the second population of labeled DNA with the array according to claim 8;

(vi) allowing the second population of labeled DNA in the sample to hybridize to the ~~LC-sense~~ large circular-sense molecule in the array; and

(vii) determining binding of the labeled DNA to the ~~LC-sense~~ large circular-sense molecule, wherein the presence of a signal on the array indicates the presence of the DNA.

17. (Original) A gene expression analysis kit comprising the array according to claim 8 and instructions on using the array to detect DNA in a sample.

18. (Currently amended) The gene expression analysis kit of claim 17, comprising:

(i) a container comprising primers for generating test nucleic acids;

(ii) a container comprising dNTPs and/or rNTPs;

(iii) a container comprising post DNA synthesis labeling reagents~~, such as chemically active derivatives of fluorescent dyes~~;

(iv) a container comprising DNA synthesis enzymes;

(v) a container comprising buffer medium;

(vi) a container comprising signal generation and detection reagents;

(vii) instructions for use in detecting DNA.

19. (Withdrawn) A method of determining cancerous liver cell comprising detecting up regulation as compared to a normal liver cell of a gene selected from the group consisting of:

Cytochrome P450, subfamily IIE (ethanol-inducible) (GenBank Accession Number J02843);

Transcription elongation factor A (SII) 1;

ESTs, Weakly similar to KIAA0206 [*H. sapiens*] (GenBank Accession Number AI193075);

Human skeletal muscle 1.3 kb mRNA for tropomyosin (GenBank Accession Number AI797037);

KIAA0701 protein (GenBank Accession Number AI797037);

mRNA for transcription elongation factor S-II, hS-II-T1 (GenBank Accession Number NM_003195);

Deafness, autosomal dominant 5 (GenBank Accession Number AF073308);

KIAA1037 protein (GenBank Accession Number AI383628);

KIAA0375 gene product (GenBank Accession Number AB002373);

Prefoldin 5 (GenBank Accession Number AA287397);

KIAA0710 gene product (GenBank Accession Number AB014610);

Paired-like homeodomain transcription factor 1 (GenBank Accession Number U70370);

Retinal outer segment membrane protein 1 (GenBank Accession Number L07894);

ESTs (GenBank Accession Number Z39419);

MYC-associated zinc finger protein (purine-binding transcription factor) (GenBank Accession Number M94046);

Ubiquitin-conjugating enzyme E2L 3 (GenBank Accession Number AJ000519);

Novel human gene mapping to chromosome 1 (GenBank Accession Number AL040438);

Homo sapiens clone 24421 mRNA sequence (GenBank Accession Number AF070641);

Homo sapiens mRNA; cDNA DKFZp566J2146 (GenBank Accession Number AL050081);

Chromosome condensation 1-like (GenBank Accession Number NM_001268);

KIAA0902 protein (GenBank Accession Number AB020709);

Protein tyrosine kinase 9-like (A6-related protein) (GenBank Accession Number AI188660);

ESTs, Weakly similar to ORF YOR150w (*S. cerevisiae*) (GenBank Accession Number AI129433);

Transcription elongation factor B (SIII), polypeptide 2 (GenBank Accession Number AW327285); and

Cofactor required for Sp1 transcriptional activation, subunit 9 (GenBank Accession Number AA665998).

20. (Withdrawn) A method of determining cancerous liver cell comprising detecting down regulation as compared to a normal liver cell of a gene selected from the group consisting of:

Transmembrane protease, serine 2 (GenBank Accession Number U75329);

Human gene isolated from PAC 272L16, chromosome 1, similar to calcium/calmodulin dependent protein kinases (GenBank Accession Number AL023754);

CASP2 and RIPK1 domain containing adaptor with death domain (GenBank Accession Number AA811130);

Ariadne homolog (GenBank Accession Number AL040708); and

NADH dehydrogenase (ubiquinone) flavoprotein 1 (GenBank Accession Number AW250734).